



OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/10/041,007

DATE: 04/25/2002
 TIME: 14:44:54

Input Set : A:\P02081US1.txt
 Output Set: N:\CRF3\04252002\J041007.raw

Does Not Comply
 Corrected Diskette Needed

3 <110> APPLICANT: Matsuda, Seiichi P.T.
 4 Schepmann, Hala G
 6 <120> TITLE OF INVENTION: Ginkgo Biloba Levopimaradiene Synthase
 8 <130> FILE REFERENCE: P02081US1
 10 <140> CURRENT APPLICATION NUMBER: US 10/041,007
 11 <141> CURRENT FILING DATE: 2002-01-07
 13 <150> PRIOR APPLICATION NUMBER: US 60/259,881
 14 <151> PRIOR FILING DATE: 2001-01-05
 16 <160> NUMBER OF SEQ ID NOS: 41
 18 <170> SOFTWARE: PatentIn version 3.1

ERRORED SEQUENCES

4068 <210> SEQ ID NO: 41
 4069 <211> LENGTH: 862
 4070 <212> TYPE: PRT
 4071 <213> ORGANISM: Taxus brevifolia
 4073 <400> SEQUENCE: 41
 4075 Met Ala Gln Leu Ser Phe Asn Ala Ala Leu Lys Met Asn Ala Leu Gly
 4076 1 5 10 15
 4079 Asn Lys Ala Ile His Asp Pro Thr Asn Cys Arg Ala Lys Ser Glu Arg
 4080 20 25 30
 4083 Gln Met Met Trp Val Cys Ser Arg Ser Gly Arg Thr Arg Val Lys Met
 4084 35 40 45
 4087 Ser Arg Gly Ser Gly Gly Pro Gly Pro Val Val Met Met Ser Ser Ser
 4088 50 55 60
 4091 Thr Gly Thr Ser Lys Val Val Ser Glu Thr Ser Ser Thr Ile Val Asp
 4092 65 70 75 80
 4095 Asp Ile Pro Arg Leu Ser Ala Asn Tyr His Gly Asp Leu Trp His His
 4096 85 90 95
 4099 Asn Val Ile Gln Thr Leu Glu Thr Pro Phe Arg Glu Ser Ser Thr Tyr
 4100 100 105 110
 4103 Gln Glu Arg Ala Asp Glu Leu Val Val Lys Ile Lys Asp Met Phe Asn
 4104 115 120 125
 4107 Ala Leu Gly Asp Gly Asp Ile Ser Pro Ser Ala Tyr Asp Thr Ala Trp
 4108 130 135 140
 4111 Val Ala Arg Leu Ala Thr Ile Ser Ser Asp Gly Ser Glu Lys Pro Arg
 4112 145 150 155 160
 4115 Phe Pro Gln Ala Leu Asn Trp Val Phe Asn Asn Gln Leu Gln Asp Gly
 4116 165 170 175
 4119 Ser Trp Gly Ile Glu Ser His Phe Ser Leu Cys Asp Arg Leu Leu Asn
 4120 180 185 190

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4123 Thr Thr Asn Ser Val Ile Ala Leu Ser Val Trp Lys Thr Gly His Ser
 4124 195 200 205
 4127 Gln Val Gln Gln Gly Ala Glu Phe Ile Ala Glu Asn Leu Arg Leu Leu
 4128 210 215 220
 4131 Asn Glu Glu Asp Glu Leu Ser Pro Asp Phe Gln Ile Ile Phe Pro Ala
 4132 225 230 235 240
 4135 Leu Leu Gln Lys Ala Lys Ala Leu Gly Ile Asn Leu Pro Tyr Asp Leu
 4136 245 250 255
 4139 Pro Phe Ile Lys Tyr Leu Ser Thr Thr Arg Glu Ala Arg Leu Thr Asp
 4140 260 265 270
 4143 Val Ser Ala Ala Ala Asp Asn Ile Pro Ala Asn Met Leu Asn Ala Leu
 4144 275 280 285
 4147 Glu Gly Leu Glu Glu Val Ile Asp Trp Asn Lys Ile Met Arg Phe Gln
 4148 290 295 300
 4151 Ser Lys Asp Gly Ser Phe Leu Ser Ser Pro Ala Ser Thr Ala Cys Val
 4152 305 310 315 320
 4155 Leu Met Asn Thr Gly Asp Glu Lys Cys Phe Thr Phe Leu Asn Asn Leu
 4156 325 330 335
 4159 Leu Asp Lys Phe Gly Gly Cys Val Pro Cys Met Tyr Ser Ile Asp Leu
 4160 340 345 350
 4163 Leu Glu Arg Leu Ser Leu Val Asp Asn Ile Glu His Leu Gly Ile Gly
 4164 355 360 365
 4167 Arg His Phe Lys Gln Glu Ile Lys Gly Ala Leu Asp Tyr Val Tyr Arg
 4168 370 375 380
 4171 His Trp Ser Glu Arg Gly Ile Gly Trp Gly Arg Asp Ser Leu Val Pro
 4172 385 390 395 400
 4175 Asp Leu Asn Thr Thr Ala Leu Gly Leu Arg Thr Leu Arg Met His Gly
 4176 405 410 415
 4179 Tyr Asn Val Ser Ser Asp Val Leu Asn Asn Phe Lys Asp Glu Asn Gly
 4180 420 425 430
 4183 Arg Phe Phe Ser Ser Ala Gly Gln Thr His Val Glu Leu Arg Ser Val
 4184 435 440 445
 4187 Val Asn Leu Phe Arg Ala Ser Asp Leu Ala Phe Pro Asp Glu Arg Ala
 4188 450 455 460
 4191 Met Asp Asp Ala Arg Lys Phe Ala Glu Pro Tyr Leu Arg Glu Ala Leu
 4192 465 470 475 480
 4195 Ala Thr Lys Ile Ser Thr Asn Thr Lys Leu Phe Lys Glu Ile Glu Tyr
 4196 485 490 495
 4199 Val Val Glu Tyr Pro Trp His Met Ser Ile Pro Arg Leu Glu Ala Arg
 4200 500 505 510
 4203 Ser Tyr Ile Asp Ser Tyr Asp Asp Asn Tyr Val Trp Gln Arg Lys Thr
 4204 515 520 525
 4207 Leu Tyr Arg Met Pro Ser Leu Ser Asn Ser Lys Cys Leu Glu Leu Ala
 4208 530 535 540
 4211 Lys Leu Asp Phe Asn Ile Val Gln Ser Leu His Gln Glu Glu Leu Lys
 4212 545 550 555 560
 4215 Leu Leu Thr Arg Trp Trp Lys Glu Ser Gly Met Ala Asp Ile Asn Phe
 4216 565 570 575
 4219 Thr Arg His Arg Val Ala Glu Val Tyr Phe Ser Ser Ala Thr Phe Glu

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4220	580	585	590	
4223	Pro Glu Tyr Ser Ala Thr Arg Ile Ala Phe Thr Lys Ile Gly Cys Leu			
4224	595	600	605	
4227	Gln Val Leu Phe Asp Asp Met Ala Asp Ile Phe Ala Thr Leu Asp Glu			
4228	610	615	620	
4231	Leu Lys Ser Phe Thr Glu Gly Val Lys Arg Trp Asp Thr Ser Leu Leu			
4232	625	630	635	640
4235	His Glu Ile Pro Glu Cys Met Gln Thr Cys Phe Lys Val Trp Phe Lys			
4236	645	650	655	
4239	Leu Met Glu Glu Val Asn Asn Asp Val Val Lys Val Gln Gly Arg Asp			
4240	660	665	670	
4243	Met Leu Ala His Ile Arg Lys Pro Trp Glu Leu Tyr Phe Asn Cys Tyr			
4244	675	680	685	
4247	Val Gln Glu Arg Glu Trp Leu Glu Ala Gly Tyr Ile Pro Thr Phe Glu			
4248	690	695	700	
4251	Glu Tyr Leu Lys Thr Tyr Ala Ile Ser Val Gly Leu Gly Pro Cys Thr			
4252	705	710	715	720
4255	Leu Gln Pro Ile Leu Leu Met Gly Glu Leu Val Lys Asp Asp Val Val			
4256	725	730	735	
4259	Glu Lys Val His Tyr Pro Ser Asn Met Phe Glu Leu Val Ser Leu Ser			
4260	740	745	750	
4263	Trp Arg Leu Thr Asn Asp Thr Lys Thr Tyr Gln Ala Glu Lys Ala Arg			
4264	755	760	765	
4267	Gly Gln Gln Ala Ser Gly Ile Ala Cys Tyr Met Lys Asp Asn Pro Gly			
4268	770	775	780	
4271	Ala Thr Glu Glu Asp Ala Ile Lys His Ile Cys Arg Val Val Asp Arg			
4272	785	790	795	800
4275	Ala Leu Lys Glu Ala Ser Phe Glu Tyr Phe Lys Pro Ser Asn Asp Ile			
4276	805	810	815	
4279	Pro Met Gly Cys Lys Ser Phe Ile Phe Asn Leu Arg Leu Cys Val Gln			
4280	820	825	830	
4283	Ile Phe Tyr Lys Phe Ile Asp Gly Tyr Gly Ile Ala Asn Glu Glu Ile			
4284	835	840	845	
4287	Lys Asp Tyr Ile Arg Lys Val Tyr Ile Asp Pro Ile Gln Val			
4288	850	855	860	

E--> 4291 (25152839 - 3 -) *delete*

VERIFICATION SUMMARY

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Input Set : A:\P02081US1.txt

Output Set: N:\CRF3\04252002\J041007.raw

L:2829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0

L:2847 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0

L:4291 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:41